

ViewSonic

E655 Color Monitor



*Graphics Series
E655*

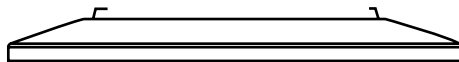
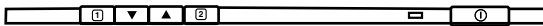
User's Guide

Guide de l'utilisateur

(Latin American Spanish)

(Brazilian Portuguese)

ViewSonic



VCDTS21443-3M/3S

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As an ENERGY STAR® partner, ViewSonic Corp. has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

Electronic Warranty Registration

Register your monitor at www.viewsonic.com. It's fast, easy, and will simplify future support needs.

ForYour Records

The serial number of this product is on the back of the monitor. Write the serial number of this unit in the space below and keep this booklet as a permanent record of your purchase to aid in identification in the event of theft or loss.

Model Name:	ViewSonic E655-3
Model Number:	VCDTS21443-3
Serial Number:	_____
Purchase Date:	_____

Power Cord Safety Guidelines

Caution : Use a power cable that is properly grounded. Always use the AC cords listed below for each area :

- USAUL
- CanadaCSA
- GermanyVDE
- SwitzerlandSEV
- BritainBASEC/BS
- JapanElectric Appliance Control Act

In other areas, use AC cord which meets local safety standards.

Power Cord Safety Guidelines (continued)

AC PLUG CORD PRECAUTIONS FOR THE UNITED KINGDOM

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET THEN THE PLUG SHOULD BE CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO AN APPROPRIATE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE EARTHED.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

If the coloured wires of the mains lead of this appliance do not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol \perp or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

IMPORTANT NOTICE CONCERNING POWER CORD SELECTION

The power cord for this unit has been packed separately and has been selected according to the country of destination and must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set.

The female receptacle of the cord set must meet CEE-22 requirements and will look like Figure 1 below:

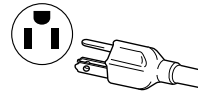
Figure 1



For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure 2) UL Listed and CSA Labelled. For units which are mounted on a desk or table, type SVT or SJT cord sets may be used. For units which sit on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult Table A below for the selection criteria for power cords used in the United States and Canada.

Figure 2



For European Countries

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR-Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors.

If you have any questions concerning which proper power cord to use, please consult with the dealer from whom you purchased your monitor.

Table A

Cord Type	Size of Conductors In Cord	Maximum Current Rating of Unit
SJT	18AWG	10Amps
	16AWG	12Amps
	14AWG	12Amps
SVT	18AWG	10Amps
	17AWG	12Amps

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning:

To assure continued FCC compliance, the user must use the grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. If BNC cable is going to be used, use only shielded BNC(5) cable. Also, any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

Power Supply Cord USA

For units with 100 - 120V input voltage in the USA, use the following :

UL Listed and CSA Certified Type SVT or SJT No. 18/3 AWG rated 125Vac 7A min.

One end terminated in a molded on parallel blade, grounding attachment cap or hooded attachment cap (15A, 125V configuration), other end terminated in a mold-on appliance coupler.

Notice for Germany

The X-rays generated in this unit are shielded sufficiently. High voltage: Max. 28.5 kV. For ergonomic reasons, we recommend that you do not display blue characters on a dark background. Doing so may produce insufficient contrast that could lead to eye strain.

Notice for Japan

This equipment falls under the class B information Technology Equipment based on the standard established by the self-imposed Control Council for Radio interference through information-processing Equipment (VCCI). This equipment is designed to be used in a household environment, However, if it is used near radio and television receiver units, radio disturbances can occur. Use this equipment appropriately according to the instruction manual.

CE Conformity



The device complies with the requirements of the EEC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to "Electromagnetic compatibility", and 73/23/EEC as amended by 93/68/EEC Art. 13 with regard to "safety".

Required item	Relative to Standard Value	Relative to those Exceeding Standard Value	Remarks
EMI*	# 1		# 4
ESD*	# 2	# 3	
RADIATED RF*	# 1	# 3	
TRANSIENT F/B*	# 1	# 3	
LINE HARMONICS	# 1		

1: Satisfies the standards with no problems in performance and reliability.

2: Effects may appear temporarily on the screen but there will be no problem in reliability.

3: There is fear of the product breaking down.

4: If a signal cable other than that specified is used, it may be the cause of electromagnetic wave interruption of peripheral devices. To assure continued CE compliance the user must use the provided 1.8m shielded video signal cable with bonded ferrite cores at both ends of the cable.

Handle correctly in accordance with the instruction manual.

*EMI : Electromagnetic Interference *ESD : Electrostatic Discharge *RF : Radio Frequency *F/B : Fast Burst

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*To meet your future needs, and to receive any additional product information as it becomes available, please register your monitor's warranty on the Internet at: <http://www.viewsonic.com>.

Getting Started

Congratulations on your purchase of a **ViewSonic E655** color monitor.

Important! *Save the original box and all packing material for future shipping needs.*

NOTE: This product was designed for operation in the magnetic fields of the hemisphere where it was purchased. Also, the word "Windows®" in this user guide refers to the following Microsoft® operating systems: Windows '95, Windows '98, Windows NT (5.0).

Package Contents

Your **ViewSonic E655** package includes:

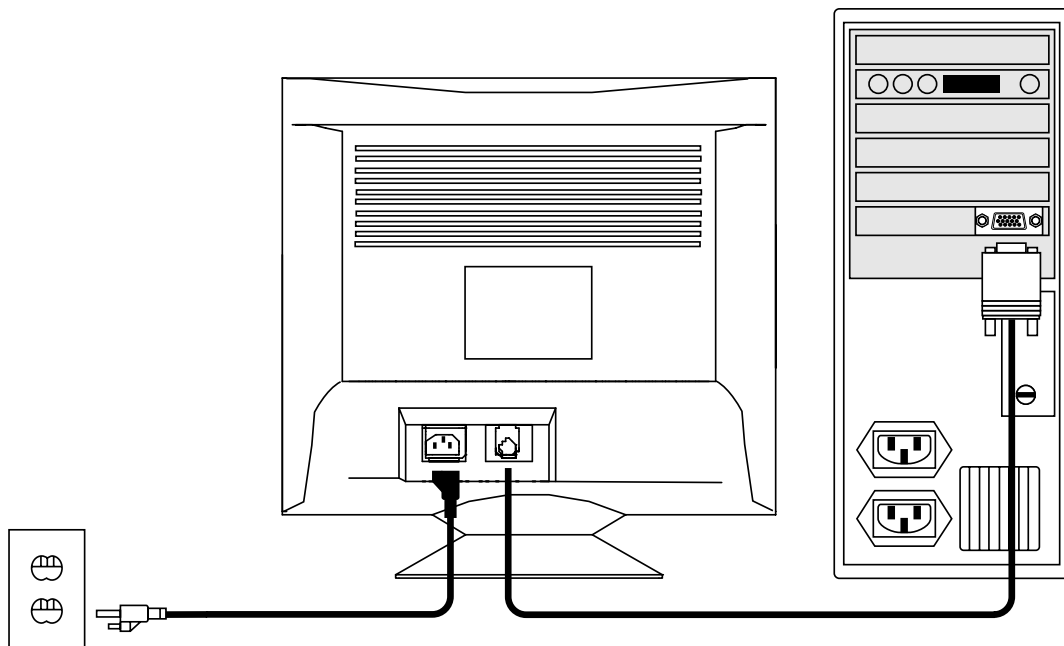
- **ViewSonic E655** monitor with attached video cable (15 pin high density mini D-sub connector)
- Power cord
- User's guide
- VS*.INF installation file on diskette or CD-ROM

Precautions

- For the best viewing conditions, sit at least 18" from the monitor.
- **AVOID TOUCHING THE SCREEN WITH YOUR FINGERS.** Oils from the skin are difficult to remove.
- **NEVER REMOVE THE REAR COVER.** The monitor contains high-voltage parts. You may suffer serious injury if you touch these parts.
- Avoid exposing the monitor to direct sunlight or another heat source. The monitor should be facing away from direct sunlight to reduce glare.
- Choose a well ventilated area to position your monitor. Do not place anything on the monitor that prevents adequate dissipation of heat.
- Ensure the area around the monitor is clean and free of moisture.
- Keep the monitor away from magnets, motors, transformers, speakers, and televisions.
- Do not place heavy objects on the monitor, video cable, or power cord.
- If smoke, abnormal noise, or strange odor is present, immediately switch the monitor off and call your dealer or ViewSonic®. It is dangerous to continue using the monitor.
- Always handle your monitor with care when moving it.

Quick Installation

- 1 Write the serial number on the back of the monitor in the space provided on page 1 labeled "*For your records*" and register your monitor's warranty on the Internet at: **<http://www.viewsonic.com>**."
- 2 Read the *Precautions* section thoroughly (page 5) before installing the monitor. Make sure the computer and the monitor are both turned off before connecting any cables.
- 3a *PC users:* Attach the video cable to the computer.
- 3b *Macintosh® users:* A Macintosh computer requires a ViewSonic® Macintosh adapter. To order an adapter, contact ViewSonic Customer

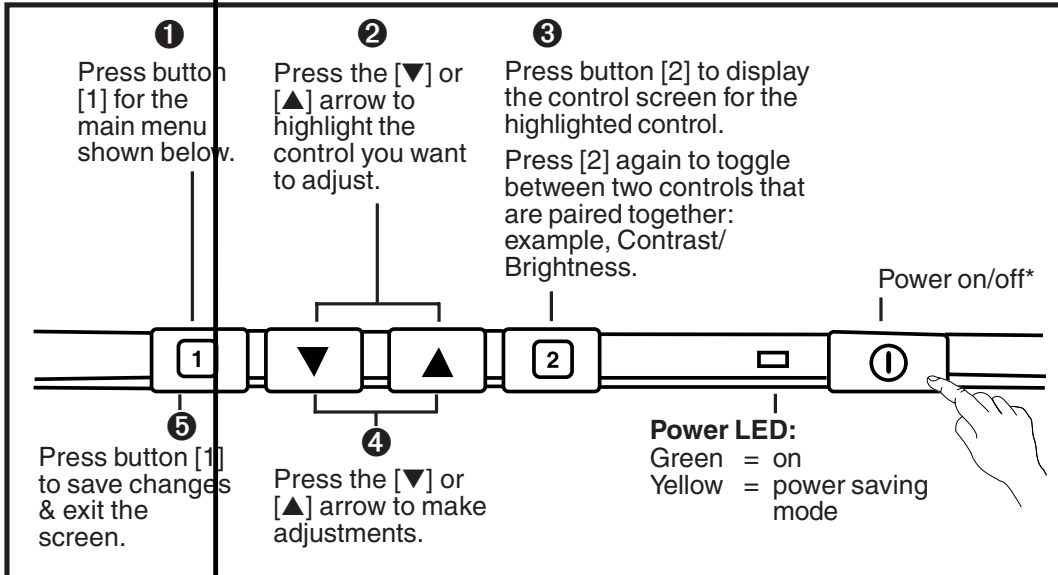


Operation

This section shows how to adjust your monitor for your personal preference.

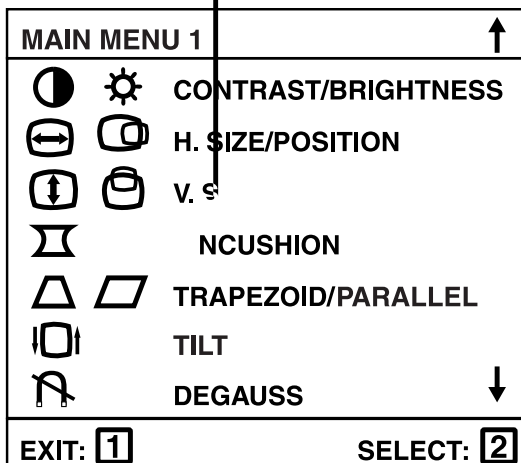
Front Control Panel

With your monitor turned on, follow the numbered steps in sequence as shown below.



E
N
G
L
I
S
H

Main Menu, Part 1



*The monitor automatically degausses each time you turn it on. Degaussing removes magnetic field buildup that can affect color purity and convergence. Do not turn the monitor off, then immediately on again repeatedly. Wait 20 minutes before turning the monitor on again to prevent possible damage. To manually degauss the monitor, see page 9.

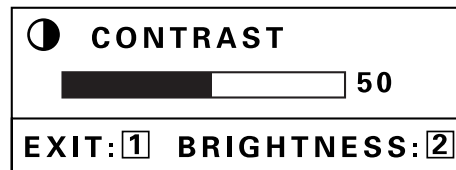
To exit a screen and save changes, press button [1].

Main Menu, Part 1

- ☉ ☀ **CONTRAST/BRIGHTNESS:** With CONTRAST/BRIGHTNESS highlighted on the menu, press button [2] again to toggle between BRIGHTNESS and CONTRAST.

- ☉ **CONTRAST** adjusts the foreground white level of the screen image. [▲] increases the contrast of the image. [▼] decreases the contrast of the image.

Shortcut: You can also display the CONTRAST control screen by pressing either [▲] or [▼] before displaying the Main Menu. From the CONTRAST control screen, button [2] goes to the BRIGHTNESS control screen.



Button [2] toggles to the BRIGHTNESS control screen.

- ☀ **BRIGHTNESS** adjusts the background brightness of the screen image. [▲] increases the brightness of the screen image. [▼] decreases the brightness of the screen image.



Button [2] toggles to the CONTRAST control screen.

- ↔ 📏 **H. SIZE/POSITION:** With H.SIZE/POSITION highlighted on the menu, press button [2] again to toggle between HORIZONTAL SIZE and HORIZONTAL POSITION.

- ↔ **HORIZONTAL SIZE** adjusts the width of the screen image. [▲] increases width. [▼] decreases width.

- 📏 **HORIZONTAL POSITION** moves the screen image left or right. [▲] moves the screen image right. [▼] moves the screen image left.

Continued...

To exit a screen and save changes, press button [1].



V. SIZE/POSITION: With V.SIZE/POSITION highlighted on the menu, press button [2] again to toggle between VERTICAL SIZE and VERTICAL POSITION.



VERTICAL SIZE adjusts the height of the screen image. [▲] increases the screen height. [▼] decreases the screen height.



VERTICAL POSITION moves the screen image up and down. [▲] moves the screen up. [▼] moves the screen down.



PINCUSHION straightens the vertical sides of the screen image. [▲] curves the vertical sides outward. [▼] curves the vertical sides inward.



TRAPEZOID/PARALLEL: With TRAPEZOID/PARALLEL highlighted on the menu, press button [2] again to toggle between TRAPEZOID and PARALLELOGRAM.



TRAPEZOID makes vertical sides of the screen image parallel. [▲] widens the top and narrows the bottom. [▼] narrows the top and widens the bottom.





PARALLEL (PARALLELOGRAM) slants vertical edges of the screen to the left or right. [▼] slants vertical edges to left, [▲] slants vertical edges to right.

TILT rotates the entire screen image. [▲] rotates the screen clockwise, [▼] rotates the screen counter-clockwise.



To exit a screen and save changes, press button [1].

Main Menu, Part 2

MAIN MENU 2		↑
	VIEWMETER®	
	VIEWMATCH® COLOR	
	LANGUAGE	
	MEMORY RECALL	↓
EXIT: [1]		SELECT: [2]



VIEWMETER® screen by ViewSonic® displays the current horizontal and vertical synchronization signal (refresh rate) coming from your computer. To adjust these values, see the graphic's card user's guide for your computer.



VIEWMATCH® COLOR provides three color control options including two preset color temperatures. Press button [2] to select a color temperature or USER.

9300K is the factory setting that is most popular for this monitor. 9300K adds blue to the screen image for a cooler white used in most office settings with fluorescent lighting.

6550K adds red to the screen image for warmer white and richer, more vibrant red.

USER control adjusts reds, greens, and blues on the screen image to meet your personal preference. With the USER control screen display, press button [2] to select R, G, or B. Then, press [▲] to increase and [▼] to decrease the color intensity.



LANGUAGE of the MAIN MENU and the control screens. Use [▲] and [▼] to select English, French, German, Italian, or Spanish.



MEMORY RECALL returns adjustments back to factory settings only if the monitor is operating in a factory preset mode (page 11).

Exception: This control does not affect changes made with the **USER** color control.

Other Information

Specifications

CRT	Type	15" (13.8"/35.0cm viewable diagonal) 0.28mm dot pitch, 90° deflection,
Input Signal	Video Sync	H/V Separate (TTL) f _H : 30-70kHz, f _V : 50-120Hz
Compatibility	PC Macintosh®*1	Up to 1280 x 1024 NI Power Macintosh® up to 1024 x 768
Maximum Refresh Rates*2		1280 x 1024 NI @ 66 Hz 1024 x 768 NI @ 87 Hz 800 x 600 NI @ 110 Hz 640 x 480 NI @ 120 Hz
Power	Voltage	AC 100-240 VAC (auto switch) 50/60 Hz
Display Area	Default Full Scan	264mm (H) x 198mm (V) (Typical) 280mm (H) x 210mm (V) (Depends on signal timing)
Operating Conditions	Temperature Humidity Altitude	32°F to 104°F (0°C to 40°C) 5% to 95% (no condensation) To 9,000 feet
Storage Conditions	Temperature Humidity Altitude	-40°F to +140°F (-40°C to +60°C) 5% to 95% (no condensation) To 36,000 feet
Dimensions	Physical (monitor)	365mm (W) x 368mm (H) x 394mm (D) 14.4" (W) x 14.5" (H) x 15.5" (D)
Weight	Net	27.5lbs (12.5kgs) Monitor only
Regulations		UL, CSA, DHHS, TUV/GS, FCC-B, Röv, CB, CE, MPR-II, TCO'92, Energy Star®, BCIQ, VCCI-B, ISO9241-3 (Ergonomics), C-Tick, Doc-ICES-003, B-Mark, EMI(B), CCIB, S-Mark, Energy 2000
Power saving modes	On DPMS™ Stand By DPMS Suspend DPMS Off	80W typical (green LED) <15W (yellow LED) <15W (yellow LED) <5W (yellow LED)

Preset Timing Modes (the monitor has been pre-adjusted to VESA® 800x600 @ 75Hz)

VGA 640 x 400 @ 70Hz VESA 640 x 480 @ 60Hz VESA 640 x 480 @ 75Hz VESA 800 x 600 @ 75Hz VESA 800 x 600 @ 85Hz	VESA 1024 x 768 @ 75Hz VESA 1024 x 768 @ 85Hz VESA 1280 x 1024 @ 60Hz Macintosh 640 x 480 @ 67Hz Macintosh 832 x 624 @ 75Hz
--	---

*1 Macintosh computers require a ViewSonic® Macintosh adapter. To order an adapter, contact ViewSonic Customer Support. See the back cover.

*2 **Warning: Do not set the graphics card in your computer to exceed these maximum refresh rates. Doing so may result in permanent damage to the monitor. NI= Non Interlaced.**

Troubleshooting

No power

- Make sure power button (or switch) is ON.
- Make sure A/C power cord is securely connected to the back of the monitor and to a power outlet.
- Plug another electrical device (like a radio) into the power outlet to verify that the outlet is supplying proper voltage.

Power on but no screen image

- Make sure the video cable supplied with the monitor is tightly secured to the video output port on the back of the computer. If the other end of the video cable is not attached permanently to the monitor, tightly secure it to the monitor.
- Adjust brightness and contrast.
- Check this user's guide to see if an adapter is required for proper signal continuity between graphics card and monitor.

Flickering

- Not enough power supplied. Connect the monitor to a different outlet. If using a surge protector, reduce the number of devices plugged in.
- Check the ViewMeter® from the main menu (page 7) to verify the refresh rate (vertical frequency) is 75 Hz or higher. See Specifications on page 11.
- Make sure the graphics card in your computer can use non-interlaced mode at the desired frequencies. To enable your graphics card to support higher refresh rates, try selecting fewer colors or running lower resolutions.
- Remove any devices from the area around the monitor that emits magnetic fields such as radios, surge protectors, unshielded speakers, fluorescent lights, AC power converters, desk fans, etc.

Wrong or abnormal colors

- If any colors (red, green, or blue) are missing, check the video cable to make sure it is securely connected. Loose or broken pins in the cable connector could cause an improper connection.
- Connect the monitor to another computer.
- Select Degauss from the Main Menu. *Do this only once.* See page 9.
- If you have an older graphics card, contact ViewSonic® Customer Support for a non-DDC adapter.

Entire screen image scrolls (rolls) vertically

- Make sure video input signals are within the monitor's specified frequency range.
- Try the monitor with another power source, graphics card, or computer system.
- Connect the video cable securely.

Control buttons do not work

- Press only one button at a time.

Cleaning the Monitor

- MAKE SURE THE MONITOR IS TURNED OFF.
- NEVER SPRAY OR POUR ANY LIQUID DIRECTLY ONTO THE SCREEN OR CASE.

To clean the screen

- 1 Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- 2 If still not clean, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.

To clean the case

- 1 Use a soft, dry cloth.
- 2 If still not clean, apply a small amount of a non-ammonia, non-alcohol based, mild non-abrasive detergent onto a clean, soft, lint-free cloth, then wipe the surface.

DISCLAIMER

ViewSonic does not recommend the use of any ammonia or alcohol-based cleaners on the monitor screen or case. Some chemical cleaners have been reported to damage the screen and/or case of the monitor. ViewSonic will not be liable for damage resulting from use of any ammonia or alcohol-based cleaners.

LIMITED WARRANTY VIEWSONIC E655 MONITORS

What the warranty covers:

ViewSonic® warrants its products to be free from defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, **ViewSonic** will at its sole option repair or replace the product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components.

How long the warranty is effective:

ViewSonic E655 color monitors, including the display tubes, are warranted for three (3) years for all parts and three (3) years for all labor from the date of the first consumer purchase.

Who the warranty protects:

This warranty is valid only for the first consumer purchaser.

What the warranty does not cover:

1. Any product on which the serial number has been defaced, modified or removed.
2. Damage, deterioration or malfunction resulting from:
 - a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - b. Repair or attempted repair by anyone not authorized by **ViewSonic**.
 - c. Any damage of the product due to shipment.
 - d. Removal or installation of the product.
 - e. Causes external to the product, such as electric power fluctuations or failure.
 - f. Use of supplies or parts not meeting **ViewSonic**'s specifications.
 - g. Normal wear and tear.
 - h. Any other cause which does not relate to a product defect.
3. Removal, installation, and set-up service charges.

How to get service:

1. For information on obtaining warranty service, call **ViewSonic**. The customer support telephone numbers are: U.S. and Canada 1-800-688-6688; from outside the U.S. and Canada 909-869-7976; from Europe +44 (1293) 643-900; from Asian /Pacific Rim countries 886 (2) 248-4072. Internet E-Mail address: vstech@viewsonic.com or World Wide Web: <http://www.viewsonic.com>
2. To obtain warranty service, you will be required to provide (a) the original dated sales slip, (b) your name, (c) your address, (d) a description of the problem, and (e) the serial number of the product.
3. Take or ship the product prepaid in the original container to your **ViewSonic** dealer, any **ViewSonic** service center or **ViewSonic**.
4. For additional information or the name of the nearest **ViewSonic** service center, contact your **ViewSonic** dealer or **ViewSonic**.

Limitation of implied warranties:

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Exclusion of damages:

VIEWSONIC'S LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. **VIEWSONIC** SHALL NOT BE LIABLE FOR:

1. DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE WITH BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
2. ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.
3. ANY CLAIM AGAINST THE CUSTOMER BY ANY OTHER PARTY.

Effect of state law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on implied warranties and/or do not allow the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

Sales outside the U.S.A.:

For **ViewSonic** products sold outside of the U.S.A., contact your **ViewSonic** dealer for warranty information and service.

Rev 2/4/98

For **ViewSonic®** Customer Support:

U.S. and Canada only

1-800-688-6688

From outside U.S. and Canada

909-869-7976

From Europe

+44 (1293) 643-900

From Asian/Pacific Rim countries

886 (2) 2248-4072

Technical Support Questions

vstech@viewsonic.com

Product or Dealer Questions

prodinfo@viewsonic.com

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<http://www.viewsonic.com>

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